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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

PATEL, GAUTAM

ART UNIT	PAPER NUMBER
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2627

DATE MAILED: 10/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/699,836

Applicant(s)

SUZUKI ET AL.

Examiner

Gautam R. Patel

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 04 May 2006.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-6 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 10/20/05.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

1. Claims 1-6 are pending for the examination.

#### Priority

2. Receipt is acknowledged of papers submitted under 35 U.S.C. § 119(a)-(d), which papers have been placed of record in the file.

#### Specification

3. The disclosure is objected for following reasons.  
The title of the invention is neither precise nor descriptive. A new title is required which should include, using twenty words or fewer, claimed features that differentiate the invention from the Prior Art. It is recommended that the title should reflect the gist of or the improvement of the present invention.  
Correction is required.

#### Claim Rejections - 35 U.S.C. § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:  
A person shall be entitled to a patent unless --  
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5 are rejected under 35 U.S.C. § 102(b) as being anticipated Arai et al., US. patent 6,021,108 (hereafter Arai).

As to claim 1, Arai discloses the invention as claimed [see Figs. 11, 13-14] including an actuator, a pickup, a lens holder, an objective lens, and an adhesive layer, comprising:

an actuator [fig. 13] for use in a pickup device [fig. 11, unit D], which moves a lens holder [fig. 11, unit 90] holding an outer peripheral portion of an objective lens [fig. 11, unit 81], wherein an adhesive layer [fig. 14, layer 99] is formed between the outer peripheral portion of the objective lens and the lens holder, the adhesive layer having a thickness dimension which is sufficient enough to absorb deformation of the lens holder when the lens holder is deformed due to resonance [col. 17, lines 7-65 & col. 18, lines 44-65].

5. The aforementioned claim 2, recites the following elements, inter alia, disclosed in Arai:

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a spacer [fig. 14, unit 91] which contacts the outer peripheral portion of the objective lens is provided between the outer peripheral portion of the objective lens and the lens holder [col. 17, lines 7-65 & col. 18, lines 44-65].

6. The aforementioned claim 3, recites the following elements, inter alia, disclosed in Arai: the adhesive layer is formed by filling an adhesive agent between the outer peripheral portion of the objective lens and the lens holder [col. 17, lines 7-65 & col. 18, lines 44-65].

7. The aforementioned claim 4, recites the following elements, inter alia, disclosed in Arai: spacer is a projection formed integrally on the lens holder [col. 17, lines 7-65 & col. 18, lines 44-65].

### **Claim Rejections - 35 U.S.C. § 103**

8. The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5-6 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Arai as applied to claims 1-4 above.

Regarding claim 5 Arai discloses all of the above elements. Although Arai does not specifically disclose that the projection is provided at each of three positions maintaining a substantially equal interval between each other along a circumferential direction of the objective lens. Arai teaches that there is gap [equal interval] between circumferential direction the objective lens. The limitations in claim 8 do not define a patentable distinct invention over that in Arai since both the invention as a whole and Arai are directed to providing the adhesive layer between the lens and the objective lens and the lens holder. The amount of time spacing provided [three times] presents no new or unexpected results, so long as the spacing is provided and the assembly is moved in a successful way. Therefore, to have three spacing would have been routine experimentation and optimization in the absence of criticality.

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9. As to claim 6 Arai teaches an actuator for use in a pickup device, which moves a lens holder holding an outer peripheral portion of an objective lens by means of an electromagnetic drive, wherein the outer peripheral portion of the objective lens and the lens holder are provided, maintaining a predetermined clearance between each other, an adhesive agent is provided in the clearance, and a resonance frequency  $f$  of the objective lens is set higher than a predetermined servo band to be applied to drive the electromagnetic drive, and lower than a resonance frequency of the lens holder [col. 17, lines 7-65 & col. 18, lines 44-65].

Arai does not teach that the resonance frequency  $f$  of the objective lens being obtained by an expression:  $f^2 = k/m$  where  $k$  is a spring constant of the adhesive agent and  $m$  is mass of the objective lens.

“Official Notice” is taken that both the concept and the advantages of providing for a resonance frequency which is a function of constant  $K$  and mass  $m$ . This concept is well known and expected in the art. In this part of claim 6, the Applicants are merely claiming the basic and fundamental equation of the resonance frequency and how a spring or spring like material functions and how frequency, spring constant and mass are related. These are fundamental concept related to any type of spring action and hence this basic well known fundamental equation is not a patentable limitations, per se [M.P.E.P. 2144.03].

#### **Other prior art cited**

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a) Blake et al. (US. Patent 5,909,323).
- b) Goto et al. (US. patent 5200940).
- c) White et al. (US. patent 5272569)
- d) Fujii et al. (US. patent 4660190)

#### **Contact information**


11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gautam R. Patel whose telephone number is 571-272-7625. The examiner can normally be reached on Monday through Thursday from 7:30 to 6.

The appropriate fax number for the organization (Group 2650) where this application or proceeding is assigned is 571-273-8300.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Dwayne Bost, who can be reached on (571) 272-7023.

Any inquiry of a general nature or relating to the status of this application should be directed to the Electronic Business Center whose telephone number is 866-217-9197 or the USPTO contact Center telephone number is (800) PTO-9199.

  
**GAUTAM R. PATEL**  
**PRIMARY EXAMINER**

Gautam R. Patel  
Primary Examiner  
Group Art Unit 2627

August 16, 2006